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Learning environmental justice and adult education in a Scottish community campaign against fish farming

Jim Crowtherⁱ, Akiko Hemmiⁱⁱ and Eurig Scandrettⁱⁱⁱ

ⁱEducation, Community and Society, University of Edinburgh

ⁱⁱLearning Technology Section, University of Edinburgh

ⁱⁱⁱPsychology and Sociology, Queen Margaret University

Abstract

Community campaigns against local sources of pollution and environmental degradation form the building blocks of movements for environmental justice. They also constitute important locations for people to learn about the environment and obtain outlooks, knowledge and skills with which to tackle pollution and address sustainable alternatives. The learning which occurs is usually informal and involves collective learning for action. A challenge to formal educators is to be able to support such learning. This account is of the learning which has been achieved during a community campaign against fish farming in the community of Scoraig in Wester Ross, North West Scotland. We identify a complex diversity of learning within the community, involving information gathering and critical analysis; between those active in the campaign and those supportive but less active; and in interaction between formal and informal education.

Key words

Environmental justice; social movement learning; adult education; fish farming; Scotland

Introduction

Environmental justice movements differ from mainstream environmentalism in that they are largely made up of local community campaigns from the social groups who are most likely to suffer environmental damage – the poor, working class, indigenous and minority ethnic communities. Just as communities become a contested locus for engagement in struggle, identity formation and learning, so too does the interaction between communities which make up a movement. Elsewhere we have explored interactions between learning theory and social movement theory (Scandrett et al 2010). Here we take up the issue of how these interactions play out in the particular location of Scoraig in the North West Highlands of

Scotland, a community which campaigned against fish farm developments in the first decade of the 21st century.

In this study we were interested in how campaign-relevant information was selected and distributed in the community, how knowledge was interpreted and analysed, and politicised for use in campaign activities, including the interaction between local knowledge and specialised knowledge. We investigated the interaction between formal education and informal learning, the role of professional expertise and activist analysis, the function of information and communication technologies in accessing and mediating knowledge, and the dynamics of learning within the community between activists, supporters and the wider public.

The evidence for this study comes from recorded interviews with residents of Scoraig, secondary sources and participant observation. The primary data were gathered in 2007 at the end of the fish farming campaign, when the authors visited Scoraig and interviewed key contacts, followed by a return visit when thirty residents were interviewed. The secondary sources refer to official documents, campaign artefacts, newspaper reports and written accounts by one of the campaigners. Participant observation refers to the involvement of Scandrett in a collaborative educational project between Friends of the Earth Scotland (FoES) and Queen Margaret University: the Agents for Environmental Justice (Wilkinson and Scandrett 2003; Agents for Environmental Justice and Scandrett 2003) and resulting access to key stakeholders.

Social movements are usually temporary formations engaged in overt conflicts against enemies (Newman 1994), which generate new knowledge and awareness or “cognitive praxis” (Eyerman and Jamison 1991). This involves developing, in one degree or another, a new “cosmology” or worldview, new “technologies” for living and new “organisational structures” which fit with these changes in awareness

and understanding. Cognitive praxis provides a way of framing movement concerns (interpretive assumptions, ideas and values which are shared by activists) and involves participants developing a repertoire of political action (Tilley 1986) which, along with the ideas, knowledge and beliefs that are generated, become resources for a critical public pedagogy that extends beyond the confines of a local struggle (Giroux 2000). This is sometimes referred to as “learning from struggle” (Hall 2009).

Individuals commit themselves to struggles for a number of reasons. Anger is clearly a powerful motivating factor in the preparedness to act individually and collectively. It is important to recognise that emotions and cognitive understanding can go together rather than be contradictory (Jasper 1997). As such they need to be included in the process of education and learning in struggles. Also, if movements are to be successful they require, amongst other things, the mobilisation of different resources and allies (Mayo 2005) that can involve a range of disparate groups and relevant interests.

Social movements often court support from competing alliances with different priorities and interests and engage in “discursive encounters” (Baviskar 2005) with actors more powerful than themselves. The activity of resistance and struggle has the potential to mould identities (Castells 1997: 8) which generate resistance, because people feel stigmatised or devalued by the “legitimising identity” of the dominant institutions and powerful forces in society. Furthermore, this “resistance identity” can lead to new “project identities” which seeks to redefine a social actor’s position in society by involving a wider system of transformation. These processes, which are personal and collective, result in, motivate and generate formal, informal, social and critical learning experiences (Foley 1999), or a “transformation of habitus” (DeLay 2008).

In terms of a process of situated learning, social movements can be thought of as a “community of practice” (Lave and Wenger 1991), as participants learn campaigning practices in order to identify, redefine and challenge their enemies. In this context, core activists to the campaign operate as part of a community of practice of campaigners, through their privileged contact with other local campaigns as well as full time activists. Legitimate peripheral participation, by those less willing to commit as core campaigners, also involves learning skills and knowledge and making particular contributions as deemed appropriate. As educators as well as researchers, the authors are interested in exploring the potential which learning and more formal education can play in supporting environmental justice struggles.

Context

Our focus is the campaign against fish farming between 2000 and 2008 by the community of Scoraig, located on the Annat peninsula between Loch Broom and Little Loch Broom, in Wester Ross on the North West coast of Scotland. Access to the village is by foot or boat, there being no road suitable for vehicle access. The people living on the peninsula operate a communal boat which carries provisions across Little Loch Broom to the main bay of Scoraig, with fuel and maintenance paid for through an honesty box. The difficult living conditions and lack of services require a degree of co-operation and mutual support amongst its inhabitants. Households mostly rely on composting toilets and wind generated electricity, and the primary school was built collectively by local residents. As one resident commented, “we are a community of necessity”.

In the early 1960s the peninsula was almost completely depopulated but during the late 1960s it became a refuge for people looking for an alternative and simpler lifestyle inspired by environmentalist and utopian socialist concerns of “back to nature”, low impact and communal forms of social organisation. The community is now settled, with a population of around 90 including a number of second

generation residents, employed in a variety of occupations. Making a living from the sea and the land around Scoraig is not easy. Crofting is common, combining vegetable and herb cultivation and some livestock husbandry with other work, including fishing, boat repairs, ecotourism, construction trades, arts and craft production and product trading and low level or casual state employment as labourers, teachers, care workers etc. Many are dependent on periods of time working in Ullapool or elsewhere in Scotland. A former research scientist from the south of England makes a living as a violin craftsman; an ex-miner and prisoner of war in Sarajevo settled there looking for a peaceful life; a wandering adventurer and part-time writer returned with his wife; a young computer engineer left his high-tech world for a crofting one and fishermen have settled there.

In the waters around Scoraig a few, small fish farms were sited before 2000 and did not generate any opposition from the inhabitants. Things changed, however, when Marine Harvest (a Norwegian multinational company which is the largest producer of farmed salmon in the world), moved into the area in 2000 to build fish farms in the mouth of Little Loch Broom close to Scoraig bay where the main settlement of houses are located.

Typically salmon farms consist of six to eight cages which reach to the seabed forming an enclosed space in which salmon are reared. Around the farms there are nets below the water to protect the stock from predators. There are many hundreds of thousands of fish in the nets at any one time – producing around 1000 to 2000 tonnes of fish per crop. When the fish have grown, harvesting ships are brought alongside the cages to vacuum them out and then they are taken down the coast to fish processing plants. The fish are fed by pellets through feed pipes and are treated with highly toxic chemicals to kill the sea lice, viral and fungal infections with impacts on the local marine environment. Licences have been granted by the Scottish Environment Protection Agency for Emamectin benzoate (88

approvals), cypermethrin (273), azamethiphos (238) and teflubenzuron (114) and significant environmental damage has been reported (MAFF et al 2002). Contamination resulting from these chemicals also occurs in farmed salmon flesh raising concerns about health impact (Hites et al 2004).

Initial reactions to the fish farm development were muted and influenced by the possibility that local employment would be boosted. However, direct employment opportunities in fish farms are limited and the main processing work is located elsewhere in Scotland. One of the initial local objections concerned the setting of the farms which, it was argued, undermined the natural beauty of Little Loch Broom. Aesthetic arguments were supplemented by local knowledge of climatic and hydrological conditions, and concerns about ecological impacts. The mouth of the loch faces North West and has strong tides and currents which damaged the farms on several occasions, and the resulting debris becoming a hazard for shipping. Another argument of the campaign focussed on the considerable damage to the seabed because of concentrations of fish lice, chemicals and excreta from the salmon.

A further worry was the infection passed by the farmed salmon to wild salmon and other sea creatures. Parasites, viral and fungal infections are all exacerbated in farmed salmon which are stressed and kept at high density with cages close together. Bad weather conditions can also damage the cages with salmon escaping and mixing with wild salmon – according to official figures around 2 million farmed salmon in Scottish waters escaped between 2001 and 2008 (Edwards 2008).

The campaign against fish farming

The campaign started with public meetings to galvanise support from those living on the peninsula as well as attempts to get backing from Highland Council and Highland and Islands Enterprise (a public body independent of government), which was supportive of organic fish

farming. The local media reported events such as the spectacular flotilla of boats which aimed to highlight the issue by blocking one of Marine Harvest's large salmon farms in Little Loch Broom. The nature of campaigns, however, is that the important organisational and planning work occurs between the visual displays of strength and anger of publicity activity. To maintain momentum campaigns have to be sustained with sound arguments as well as organisational skills. Moreover, it is involvement at this level that usually creates the possibility that active participation leads to greater depth and breadth of learning experiences.

The main enemy of the campaigners was the large-scale, industrial fish farming epitomised by the activity of Marine Harvest. But this enemy was extended and refined during the campaign. The Scottish Government supported the development of the aquaculture industry by encouraging the expansion of larger fish farms and by simplifying regulations so that companies could respond to market conditions. The government body responsible for monitoring this development is the Scottish Environment Protection Agency (SEPA), an agency which campaigners were very critical of for its role in protecting the interest of fish farmers (it was re-named by them as the *Salmon Employers Protection Agency*) and not being sufficiently independent from government. Finally, the Crown Estate owns and controls use of the coastal seabed by providing leases for farm fishing. The Crown Estate, a public body theoretically acting in the interests of the people of Scotland (through the office of the Crown), was acting more as a private business. Campaigners were highly critical of its role in leasing to fish farm interests in order to maximise profits, rather than ensuring that sea bed use benefits the community.

The political repertoire of the campaign changed over time. The initial public meetings of the Scoraig Association demonstrated wide support from local inhabitants and led to letter writing campaigns to politicians and councillors. More technical attempts to block

developments involved detailed planning objections to the location of fish farms, which then required consultation and investigation. The floating blockade of over 40 vessels circling one of the main fish farm developments visibly demonstrated public dissent and captured media attention. A DVD of marine life on the seabed and in local waters was produced to show the richness of the environment and the negative consequences of pollution. This was used as a touring educational resource for schools, community centres and libraries. In conjunction with FoES, leaflets and protests near key supermarket chains across Scotland extended the struggle outwards and linked the Scoraig campaign with salmon conservationist groups.

The campaign ultimately involved diverse interests emphasising different elements of the fish farm development. With the community of Scoraig at the centre of the campaign focussing on aesthetic, ecological and livelihood arguments, other local people were concerned about impacts on fishing employment. Some interest groups concentrated on recreational diving, biodiversity and health impacts of contaminated fish meat, whilst estate owners in the area were concerned about the potential impact on the lucrative business of wild salmon fishing on their estates.

Finally, the focus of the campaign gave way to contesting the property rights of the seabed and the mechanism through which the Crown Estates permitted its use for farming fish. This raises potentially far reaching concerns about accountability in decision making by the Crown Estates, and how Crown property might alternatively be deployed for the common good.

Marine Harvest closed down operations in Little Loch Broom during the latter half of 2008. The reasons for this are likely to be varied: the unsuitability of some of the sites (as pointed out by the campaigners); possibly the impact of the campaign itself (although this is notoriously difficult to assess) but also because of shifting economic fortunes of

the transnational fish farming industry. The coast of Chile has attracted interest as a more profitable location for exploitation so some of the fish farming has now switched to another part of the globe.

<Figure 1>

Learning in an environmental justice struggle

This conflict was between a powerful multinational backed by government and resisted by a broad cross section of local people. In these terms all of our respondents would recognise their cause as one of environmental justice, but only one activist used this vocabulary consistently. The peripheral participants refer to the campaign more in terms of defending the natural beauty of the environment that is being degraded by the unsightly fish farms and the damage to the seabed and wild salmon. The material conflict of interests between the Scoraig community and the multinational company, which exploits their environment, is clearly evident in their responses even if the language of environmental justice is not articulated. However, the vocabulary of environmental justice helped to extend the nature of the struggle, to connect with other environmental justice campaigners and resources. We illuminate the experience of two activists who represent the development of a “resistance identity” and a “project identity” (Castells 1997).

In addition, we argue that campaigners developed a wide range of technical knowledge about fish farming and about how to campaign as well as critical awareness about the process of power and its exercise in relation to knowledge claims. This critical awareness was very evident amongst core campaigners, as one might anticipate, but also clearly present in the understanding and analysis of those participants who were more on the periphery of participation.

Baviskar (2005) argues that social movements engage in “discursive encounters” with powerful groups and organisations as potential allies, through which their collective identity may shift and change. In Scoraig, contact with FoES led to key activists identifying their campaign as an environmental justice struggle and thus attracting the support not only of this NGO but also a number of other local campaigns which identified with the environmental justice frame. At the same time, discursive encounters with more powerful actors gave the campaign a different emphasis. The wider public mobilisation against salmon farm fishing was focussed more on the toxic chemicals involved in food production and the need for wild salmon conservation rather than echoing a demand for environmental justice.

Two of the key people in the campaign participated in the Agents for Environmental Justice programme, an eighteen-month course using popular education with a range of activists across Scotland actively engaged in environmental justice struggles (Scandrett, O’Leary and Martinez 2005). It was organised through six weekend residential courses, in each case located near to a site of activists’ campaigns, backed up with distance learning materials and visits by FoES staff. The curriculum was designed to provide community environmental activists with the knowledge and skills to help them further their campaigns. It involved developing generic skills (such as use of the media, fundraising) and theory (such as economics, science of the environment) which engaged with the specific issues that the activist-students brought to the course (eg fish farming, opencast coal mining). The philosophy underpinning the course was that of environmental justice, so activists were exposed to a way of thinking about their campaign which connects it to other local campaigns and wider socio-economic and ecological processes.

Participation in the course also involved regular contact with activists involved in different campaigns and with FoES’s attempt to develop a community-based network of environmental justice campaigns. Local

activists could link with a national organisation with campaigning experience, environmental expertise, networks and contacts that were resources for the Scoraig struggle. FoES's media officer helped the group design press releases to capture media interest, and Don Staniford of the Global Alliance Against Industrial Aquaculture was able to publicise the Scoraig campaign in national and international news reports and through email lists and bulletin boards.

In the following two subsections we recount the experience of the two Scoraig residents who were involved in the campaign and in the FoES course: N, a woman in her mid 30s, originally from a working class background in the English midlands who moved to Scoraig with her partner and runs a small market garden. She eventually dropped out of an active role in the campaign, and the course, although still vehemently opposing the fish farming. A, a man in his early 30s was born on the peninsula. His father was one of the first of the "new" inhabitants who settled in the 1960s and still lives nearby. A works intermittently as a roofer and care worker, and runs a croft with his partner, an artist and pottery maker, where they live with their children. The experience of A led him in the direction of acquiring a new "project identity" in terms of developing a transformative analysis of the problem Scoraig residents experienced and how to resolve it.

a) N's experience

Learning in campaigns is a visceral experience and whatever insights or understanding that is gained may come at a personal cost, particularly for the inexperienced:

"Sometimes it became painful because most of the time we weren't winning and then we won something, but for two years we lost, so it was a lovely time when you felt it had worked and had been worth it, but there were times when it was painful and you just wanted to put it out of your head."

Although campaigns may collectively empower people, the experience for participants, at any point of time, may be very different. Unequal resources can lead to a dispiriting sense of never being able to overcome the enemy. For example, the campaign had temporary success in blocking a planning application by Marine Harvest at a regional level with Highland Council supporting the case. The multinational was able to appeal the decision at the level of the Scottish Government which, backing the growth of the aquaculture industry, found in favour of the company. The impact was felt as

“It doesn’t matter how much vision or sound knowledge you throw at the system, it will still do what it wants. The power is in the hands of the developers, in the short term anyway.”

Dealing with the media can be a difficult process with potentially damaging learning experience for those without prior knowledge of how it works. N referred to an unsatisfactory television interview she gave which presented the campaigners as “strange people”. To develop her campaigning skills she joined the Agents for Environmental Justice course and became a member of FoES. N found the practical side of dealing with the media particularly helpful but was less interested in discussing the theory of environmental justice and would have preferred directive guidance on how to campaign. Difficulties of accessing online materials for the part-distance learning course also sapped her confidence because of the feeling that she was falling behind. However, negative experiences were also accompanied, and to some extent offset, by greater in-depth knowledge of the issues involved.

“I learned a lot about salmon farming. There’s lots of documentation that I got hold of, one way or another, from people who had done research on it and written reports. You meet various organisations, because it’s quite a big area but a small community. I got in touch with the Ullapool subaqua

diving club – they're recreational divers and there are wrecks that might be affected by the farm development – and through them I got pictures of the wreck and all the animal and plant life. The report they did on the effect of the fish farm – you know, you just accumulate information.”

Specific detailed knowledge is to be expected because in order to sustain a campaign the arguments need to be learned and the evidence accumulated and digested so that it can be used in a language that wider supporters and the public can grasp. This level of familiarity with the issue takes time for absorbing and discussing the material with other campaigners and supporters. It is a social process of learning that is paramount. Moreover, campaigning brought her into closer contact with new people who she developed respect for and helped to broaden her outlook. This experience is captured in the comment below.

“It made me think a lot and question things a lot more. I used to feel because I lived in a place so remote and isolated here that I wouldn't be touched by the outside world. It would touch me but not so directly, not right in my face with the heavy pollution and heavy industry. The fish farm...would change this place....completely. The landscape would look the same but the noise, the stink, the pollution, the traffic in the sea and the wildlife would be affected...I think if there is oil, fish, money, there will be a developer somewhere and it's another way of colonialism. It made me think a lot more about this experience globally. People whose lives are destroyed, in what ways, and it's just going on everywhere.”

All the “ups and downs” of the campaign led, however, to N coming to the conclusion that she wasn't a good campaigner and this resulted in her dropping out:

“I realised at the end of it I’m not a campaigner, I’m good at lots of things and I like talking, but I’m not a good campaigner because I’m up and down with my own heart. You can’t be like that, can you, when you have to go to a meeting or an interview? It is harder than people think to be a good campaigner, isn’t it?”

Arguably, N’s “masculine” understanding of what a good campaigner is – one who does not allow emotions to interfere with rational argument and drive – a perspective from which she distances herself, points to the very real and contradictory experiences that learning in campaigns can generate. Whilst her experience reinforced her “resistance identity” it did not go beyond this. If education is to assist communities in struggle it will need to address more fully how people can manage to develop their personal strengths and capacities which make their sacrifices worthwhile and create the possibilities for new “project identities” to emerge and be nourished.

b) A’s experience

A became the fulcrum of the campaign, its public spokesperson and elected chair of the Scoraig Association. Reflecting on his own activism, and echoing N, he states that:

“I believed, naively, that our community was somehow immune to intensive developments. The close interaction with the land and the reliance on the natural environment is the overriding quality of this way of life. A way of life that I find I am prepared to go to length to protect, now assuming an active role I probably would not have filled, had the community not been threatened by proposed impending developments.” (Agents for Environmental Justice and Scandrett 2003: 13)

His determination, fuelled by anger at the impact of the fish farms on the environment, and his articulate passion for the campaign's cause ensured it was kept alive – sometimes by his own efforts alone. A's participation in the Agents for Environmental Justice course strengthened his understanding, resolve and articulation of the struggle as one of environmental justice. His acquisition of a new "cosmology" can be explained in terms of the vocabulary of environmental justice which facilitated his deepening analysis and awareness. As a key activist he became the main point of contact with external allies at FoES, Highland Council, Highlands and Islands Enterprise and statutory bodies such as SEPA. At the centre of the campaign, A also began to articulate a new mode of "organisation" that was necessary for the future of Scoraig and similar communities. This is evident in his probing of the legal strength of the Crown Estate's role in leasing the seabed.

"The real problem", as A points out, "began twenty-five years ago when the Crown Estate, who consider themselves owners of the seabed, earmarked hundreds of potential sites dotted over the entire West Highland coast, to lease out to the growing fish farming industry". His knowledge of the context in which this occurs is impressive.

"There are around 350 fish farms in the Highlands and Islands, that is at least one in every inshore sealoch, the industry is worth £700 million to the Scottish economy and the product makes up 40% of Scotland's entire food export. The Crown Estate makes £250 million per annum in lease rental, which goes straight over to Westminster, and a meagre 2% is reinvested into Scotland...Not only is the ownership of the Scottish seabed assumed by an English institution, but the majority of leaseholders are foreign-based multinational companies." (Agents for Environmental Justice and Scandrett 2003: 14)

A believes that the campaign's argument had to be taken in the same direction as the community buyout schemes¹ so that coastal waters can be owned by the people who live and work there because they identify with the place and have a long-term commitment to it. A new pattern of cooperative organisation of coastal areas can then help local communities survive and flourish.

It is abundantly clear that A has gained impressive skills of leadership, and reflected that the most important thing he learned was "never to take a quick decision without consulting other campaigners". Accountability to his campaign constituency was critical to the legitimacy of his role and his capacity to negotiate the campaign's position. Along with persuasive public speaking skills he has also developed a highly sophisticated, in-depth critical analysis of the situation, as well as a wide range of knowledge about fish farming issues and land rights, normally the preserve of environmental and legal specialists. All this culminates in developing a new "project identity" which involves the transformation of structures of power in the wider society, in this case exemplified by challenging the power and control over the use of the seabed. However, all this came at some personal cost particularly as movements are fuelled by emotion as much as by arguments and rationality. The time and energy he put into the campaign had personal consequences. Activist "burn out" is not uncommon particularly where participation is reduced to fewer people taking on the work that needs to be done. The stresses and strains of this rebounded onto his home and family life and this has made him wary of continuing to over-commit himself. Having said that, the tide of the campaign moved in the direction of the campaigners by late 2007 as Marine Harvest began to relocate

¹ Community buyout, or right to buy, is a legal instrument introduced in Scottish land reform legislation in which communities have the opportunity to buy, collectively, land on which they live or work, at an adjudicated price. This has been done successfully in several crofting and other rural land areas in Scotland, though never in coastal waters.

activity, paradoxically at the time when the campaign had reached its lowest point.

In both of these personal accounts the importance of the affective and emotional dimension of campaigning needs to be highlighted and incorporated into educational activity, which seeks to assist communities of struggle. Clearly campaigners need critical awareness, they also need skills for campaigning such as dealing with the media and planning processes but these, on their own, may be insufficient to mobilise and sustain the resources of struggles. Fundamental to the distinction between N and A's experience is that the latter acquired a new "cosmology" which helped him place his local exertions into a wider frame that sustained his commitment as well as creating allies. This, in turn, generated the analysis which formed a new "project identity" that was transformative. If "resistance identities" are to become transformative then education has a crucial role to play. The creation of alliances, learning a repertoire of effective actions, fine-tuning skills and analysis are all important but, on their own, they are unlikely to sustain motivation without the acquisition of a new vocabulary in which the meaning and significance of sacrifices and actions are assessed and valued by those involved.

Peripheral participation

A number of people who supported the aims of the campaign gave various personal reasons for not being more involved although these did not stop individuals participating intermittently. For example, the postman, an amateur scuba diver, took underwater pictures to show the damage to the seabed and passed information on his postal round in Scoraig, but never became more consistently active. Fishermen from neighbouring areas supported the campaign in private, whilst publicly keeping their heads down. An ex-miner was employed on the feed systems for the salmon cages and disclosed information about the use of chemicals, but did little else. This kind of

involvement, in-between active participation and taking the role of a spectator, was not untypical amongst our informants and is referred to, after Lave and Wenger (1991), as “legitimate peripheral participation”. In the analysis below we focus on recurring justifications that were expressed, in a number of individual cases, by those informants classified as “peripheral participants”.

For environmental justice struggles to be successful, environmental interests have to dovetail with the interests of the powerless or exploited social groups in a mutually supportive way. Typically, oppressed people have organised around material issues at the expense of the environment. The tensions between these two interests – the environment and the material needs of powerless groups – can be identified in some of the responses we heard. The first of these relates to the trade off between environmental concerns and dependency on companies such as Marine Harvest for jobs. In addition there is a form of “cost-benefit” analysis of the likelihood of success against powerful forces. These two tensions are often placed in relation to one another and peripheral participants engage in a process of learning in order to discern these tensions and make decisions on the basis of existing and acquired knowledge.

The first comment below is from an individual who attended public meetings, wrote letters to Members of the Scottish Parliament and participated in organising the blockade. Her view raises the tension involved in opposing unwanted developments on which people are more or less dependent.

“No I don’t agree with [fish farming] at all but I don’t see where we are going to get with it. It’s such a big business and just generally in Scotland there is not much income into the economy...so you can’t really win. Well maybe you can, I hope I’m wrong.”

This juxtaposition of an attitude of resistance, and analysis of dependency on those with material wealth, is real enough. The interests of the powerful are dominant and the chances of success against them always conditional and fraught with the likelihood of failure while local people need the money that fish farms bring. The trade off with jobs is a case in point. The ex-miner felt the campaign was important but he articulates the contradiction that conserving the environment could cost jobs.

“I didn’t want the fish farms at all...but in the end a lot of lads would have lost their jobs...I would have been responsible for that. So there’s a bit of a dilemma. When I was down in England, when they closed the pits, I got involved in that, but here it was a bit more awkward. For once I was fighting to lose people’s jobs, which was totally against all I’ve ever fought for.”

Environmental justice campaigns often have to address the dilemma of organising the least powerful against what may seem their material interests in jobs and employment. This is not an easy issue to wish away. On the one hand, the desire to conserve the environment on which the community is materially dependent and, on the other, the dependence on companies such as Marine Harvest for jobs and money. The result can be a paralysis of activism – or a limitation on it - because it seems to be self-defeating, merely biting the hand that feeds.

Another argument, similar to the above is more politically strategic in terms of assessing the likelihood of success:

“They’re such a big company [Marine Harvest] and fish farming is a big part of the Scottish economy. To try and stop something as powerful as a body of people like that, when you’re as small as we are, it’s a bit like pissing in the wind. I

don't want it there [the fish farm]...but what are you going to do about it? They're going to do it, they've got the money to do it and they've got the lawyers to fight battles with people like us, and I thought probably it was a waste of time..."

The power of powerful groups to "outflank" resistance (Mann 1986) through superior resources means it does not have to try and win consent. In this analysis it doesn't make sense to put effort into resistance – or at least not a good deal because winning is unlikely. The enemy have the resources to hold their position by employing the professional services of groups who can outsmart resistance. But this fatalism simply serves to reinforce the experience of powerlessness. The dominant groups get their way because the powerless have internalised the attitude that making a difference is unlikely. McCarthy and Zald (1977) have drawn attention to the rational choice taken by social movement actors in assessing the costs and benefits of participation. Here it appears that at times rational choice can lead to full participation and in other circumstances to peripheral participation or indeed fatalism.

The situated nature of learning in struggles will vary with the degree of participation individuals commit themselves to. The experience of A involved the development of a new identity with transformative potential. Activist N became more aware and informed about the issues involved which reinforced her "resistance" identity even though she became less active in the campaign. The intermediate position of participation also led to significant learning taking place, even if not quite so dramatic, which maintained a weaker sense of "resistance" with suggestions of the potential for new "project identities" to develop. For example, the ex-miner resolved his dilemma of the conflict between jobs and the environment for himself by learning to change:

“One time I would have thought it was totally illogical to put people out of work. I would *not* have looked at the broader picture, whereas here you are looking at longer-term things. Like eventually they will kill all the sea dead, there will be no fish and they [his friends] will be out of work anyway and no one will have anything to eat...You have to look at the broader picture, whereas a few years ago I wouldn't have done.”

This broadening of outlook did not, in this case, involve a new “cosmology” expressed through a vocabulary of environmental justice. But it is a fertile change of outlook which is clearly open to this type of critical-ecological understanding to emerge. Without the type of formal education which A and N undertook the chance of this developing casually is slim. Instead, those on the periphery of struggles are far more likely to increase their technical knowledge:

“I know about fish farms and the chemicals they use and things. It's definitely made me more aware about them.”

But technical knowledge was not all that was learned. Perhaps more fundamental was learning how power works in relation to knowledge claims. The first quotation below refers to official knowledge that found in favour of a plan to develop a super fish farm, which the campaign had attempted to block, and which the respondent N rejects because of the insights developed through the counter-knowledge developed in the campaign

“...when his report came out it was just rubbish...He obviously doesn't know anything about wild salmon and he doesn't know anything about fish farming. It's a report full of contradictions...”

The subtle but powerful role of administrative procedures and technical expertise as forms of power is also evident in the next comment from a peripheral participant.

“What I learned is that there are people trained to deal with people like us, and it is their job to come to the community where they can have an answer for every question and away they go again.”

The final quotation above refers to inequalities of power that become represented by experts against lay people. The discourse of science in environmental disputes positions the expert as the voice of credible knowledge whereas local knowledge is devalued because it is parochial. Moreover, the resources of the powerful make it more likely that they can draw on such expertise, more so than campaigns with limited resources. In this example, alliances with FoES and other interested groups and individuals was part of correcting the balance of forces. It is in relation to this that information and communication technologies aided the struggle - to some extent.

Learning through information and communication technologies

One of our starting hypotheses for the broader study into environmental justice campaigns was that information and communication technologies (ICTs), such as email and the Internet, can play an important role in facilitating participation in campaign activity. It can connect people electronically, act as a conduit for passing information and become a tool in the political repertoire of campaigners. We knew that two of the key activists had used the Internet and computers to participate in the Agents for Environmental Justice course. Indeed, A, through his participation in the course, was diagnosed with dyslexia and was provided with computer hardware and software to facilitate his studies – and his campaigning. Also there had been a plan for broadband connection in the area through satellite links. This, we subsequently discovered, was abandoned

because of the costs and very few local people seemed concerned about it. Internet connections were possible but only via dial up, which can be slow and costly.

When we asked people if they had used new technologies the only one that seemed to play a consistent role was the mobile phone. It enabled people to keep in touch when organising an event such as the blockade, and it also enabled the campaign organisers to keep in contact between meetings. It was clear that the culture of life on Scoraig did not really encourage a deep interest in technologies. In this context, ICTs in the campaign were limited and used strategically by the two activists to participate in the environmental justice course run from Edinburgh. However, for N, this was a frustrating experience because her reliance on wind power without adequate battery reserves meant a lack of electricity. Overall, therefore for the Scoraig campaigners there is little evidence of building participation through technology.

The only significant use of technology to enhance the campaign was by the international campaigner who helped publicise the Scoraig struggle to a wider audience, and provide the local campaign with information about struggles elsewhere, through electronic broadsheets, information bulletins and emails. He became a useful resource in a network of campaigners and his knowledge, experience and status gave him access to quality newspapers, which enabled him to publicise the Scoraig campaign and others too. Whilst this individual was a useful ally he was not part of an environmental justice campaign as such. His role in publicising the campaign is linked more with a wildlife conservationist philosophy. In contributing to a wider campaign against fish farming, however, the educational message that is being promoted has little to do with environmental justice concerns.

Learning from struggle: educating the wider public

Dear Sir

There is a lot of guff printed in your organ about fish farming, mutations and other such nonsense. My dear wife and I had a leg of Scottish salmon last week and it was delicious.

Sincerely

(*Private Eye*: number 1127)

Satire can be a powerful political weapon but its value is only evident when there is already an understanding and public stock of knowledge available with which it can resonate. There is little doubt that a kaleidoscope of awareness raising activities from a variety of different forms of campaigning activity, involving public information leaflets, picketing of supermarkets selling farmed salmon, articles by environmental journalists highlighting the issues, the educational activities of wild salmon campaign groups nationally and internationally, and so on, percolated their way into public consciousness of the dangers involved in eating farmed salmon. In response to growing public unease, for example, Sainsbury's who were supplied by Marine Harvest, began to run a series of adverts which involved the celebrity chef Jamie Oliver travelling and cooking in the Scottish Highlands to demonstrate just how juicy farm salmon can be and how serious Sainsbury's care about the quality of their food products. As a result angry Salmon Farm Protest groups picketed Jamie Oliver's restaurant in London, particularly as farm salmon was not on his menu (*Times Online*, 2004). Oppositional celebrity chefs, such as Clarrisa Dickson Wright (of Two Fat Ladies television cookery programme) weighed in on the side of the conservationists, depicting Oliver's performance for Sainsbury's as that of a "whore" (*Independent on Sunday*, 2004).

The Scoraig campaign, amongst others, contributed towards the impetus and resources for a diffusive programme of public education over the quality of farmed fish and its potential damage to the

environment and to people eating salmon. However, this wider programme of educational activity involved a change in the nature of the terms of the campaign. As movements engage in “discursive encounters”, more powerful discourses tend to incorporate and change the terms of the debate. The message of the campaign for public awareness is mainly framed in terms of the implications of farmed salmon for wild salmon conservation as well as the human health risks from eating farmed stock. This conservationist/health framing of the public education activities is very different from an environmental justice framing of the problem. What people were being educated to do is to change their consumer habits so that pressure would be put on the supply side of fish farming to change their practices. This is a long way from what activist A described as the crux of the problem as one of power and control – that is, ownership and management of the seabed by the Crown Estate.

The discursive encounter between Scoraig’s environmental justice campaign and the more powerful conservationist/health message of the public awareness campaign led to the emergence of a very different discourse. The overlap of interests meant that a strong tactical alliance was possible in opposition to fish farming. However it also resulted in ambiguity and the reframing of goals that reflected conflicting interests within a broad movement. Small-scale campaigns, like Scoraig’s, contributed to this wider awareness-raising activity and this is no small achievement. But this occurred at a cost. Environmental justice: the socially unequal impacts of the environmentally damaging logic of profit maximisation, whether by multinational corporations or by supposedly public agencies, was not the message of this public awareness campaign.

Conclusion

An important result of the campaign is the fact that it enabled the Scoraig community to exert some leverage on the multinational company and demonstrate their collective agency in the

circumstances. “Resistance identities” did make a difference to the outcomes achieved and the possibilities for more transformative “project identities” to emerge is evident if unrealised on a large scale. The community were not powerless and the formation of the Scoraig Association created a means for the local resources of the people to articulate a collective voice. In community development terms, it was a genuine case of collective self-help and community empowerment directed against a common enemy. However, few people attributed the decision of Marine Harvest to move operations as a response to the campaign itself. In addition, the ownership and control of the seabed is still the prerogative of the Crown Estate. Nevertheless, the campaign has been resourceful, it advanced a strong argument based on developing local knowledge and deployed a range of successful strategies to further their cause.

Whilst the campaign outcome was ambiguously successful, the process was rich in learning experience. Both core campaigners and peripheral participants demonstrated a wide range and depth of learning through the campaign. Two of the core campaigners participated in specially designed formal education, one of whom completed the Higher Education Certificate. What they learned from this programme was more complex than the educational curriculum on offer. Certainly gaining the practical skills in campaigning was valued by both and, for A, the development of a new “cosmology” was aided and sustained. Moreover, the critical capacity encouraged through disciplined education was applied in other contexts including understanding the role of the Crown Estates in political power relations. The course also provided contact with activists from other local environmental justice struggles, as well as NGO workers, international campaigners and engaged academics.

However the educational benefits of the formal course was a small part of the learning undertaken. In the contrasting case of A and N, the course facilitated the process of learning to be – or not to be – a

campaigner. The related process of learning to sustain ones-self emotionally, whilst being a component of the formal course, is arguably inadequate to the task of dealing with the personal impact of campaigning. More fundamentally, it also shows that the development of a world view that can make sacrifices worthwhile is critical to sustaining momentum of campaigns which are invariably of long duration.

Core activists and peripheral participants alike learned a great deal about fish farming, the chemicals used and impacts on health and the environment. They acquired knowledge about the environment and critically analysed existing environmental knowledge about the locality. Moreover this was further developed in the context of understanding both narratives and structures of power, and discerning between contradictory interests and tensions.

Similar aspects of learning applied beyond the participants in the external public education role of the campaign. Local knowledge played an important role in convincing the wider public that there were serious pollution problems caused by the fish farms. Also, whereas Marine Harvest denied the use of chemicals in treating the fish, the campaigners were able to make a convincing case that pollution was damaging the seabed and that the Crown Estate had to take this into account in leasing agreements.

The campaign has also added a collective memory to the narratives of life on Scoraig and the skills of organising a community campaign. For the educator committed to socially just pedagogy, the potential to contribute towards such struggles is clearly evident in the Agents for Environmental Justice course and the experience of the two Scoraig activists. Their involvement had a cascading affect in terms of influencing the campaign because of the awareness, ideas, knowledge, insight and leadership that developed, particularly in the case of A. But there was little educational engagement with those on

the periphery of the campaign and this may mean that what they learned, and the contradictions that they experienced, missed out on the potential for more transformative identities to emerge. The space for educators to engage with campaigns is somewhat limited and perhaps the best that can be hoped for is a strategic one of focussing educational effort at key activists at the core of campaigns. If this is the case it also means the inherent potential for learning in campaigns, amongst a wider range of supporters and participants, is also constrained.

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Figure 1

Timeline of events

- 2000 Marine Harvest (multinational company) expands salmon fish farming in remote scenic area. Scoraig Community Association starts a letter writing campaign of protest.
- 2002 Two members of the Scoraig Association join FoES Agents for Environmental Justice course.
- 2002-03 Flotilla of ships blockade the Static Point fish farm at the mouth of Little Loch Broom. Christmas campaign to boycott farmed salmon launched.
- 2004 Bad publicity about salmon fish farming in Scotland leads Sainsbury's to employ celebrity chef Jamie Oliver to sell the product.
- 2005 Planning objections to block new super fish farming plans at Annat Bay (north side of Scoraig) fail. The Scottish Executive supports the development of the aquaculture industry and larger salmon fish farms.
- 2005-06 Marine Harvest decommissions the Static Point fish farm (which was the focus of the flotilla blockade).
- 2008 Celebrity chef Jamie Oliver is in trouble for his marketing role in Sainsbury's 'responsible' fish farming campaign.
- 2008 Marine Harvest close down their fish farming interests around Scoraig